

### Abstract

The present invention discloses a method and a device for processing optical signals in a computer mouse, which is related to electric digital data processing. The method is that the relative displacement vector between the mouse device and the illuminated object surface producing laser speckles is reflected by means of collecting movement information of laser speckle signals. The device for carrying out the method consists of a mouse body; inside said mouse body, an amplifying and shaping module, a direction identifying and counting module and a computer interface circuit for processing photoelectric signals are disposed and connected in sequence, characterized in that, said device further includes at least one laser device and a photo sensor for receiving laser speckle signals from the object surface illuminated by laser beams. Said photo sensor transfers the received photoelectric signals to the amplifying and shaping module. This invention has a simple structure, high technical feasibility and high precision.

(Fig. 5 for Abstract)